

Remarks

Applicants have amended claims 1, 4, 5, 7, 8 and 11, have canceled claims 2, 3, 12 and 13, and have added new claims 16 to 20. Accordingly, upon entry of this Amendment, claims 1, 4 to 11, and 14 to 19 will be pending in this patent application. Applicants now address each and every point raised in the above-identified Office action as follows:

I. Rejection of Claims Under Section 102 - Young

Claims 1, 2, 4, 7, 11 and 12 have been rejected under 35 U.S.C. § 102 as being allegedly anticipated by Young. Applicants have canceled claims 2 and 12, thereby obviating the rejection of these claims. Applicants have amended independent claims 1, 7 and 11 to better clarify the features of its invention. Specifically, these claims have been amended to recite the feature of the header plate including both an axially projecting section, and a lip that extends radially outwardly from the axially projecting section.

Young fails to disclose or remotely suggest a header plate configuration comprising a lip that projects radially outwardly from the axially projecting section of the header plate. Since Young fails to disclose each and every feature recited in Applicant's amended independent claims, Applicants submit that Young does not properly anticipate these claims and

Amendment Dated April 6, 2006
Reply to Office Action Dated
January 6, 2006

-8-

Appl. No. 10/737,380
Atty. Docket No. H0004919

respectfully requests that the rejection of these independent claims, and claim 4 depending from independent claim 1, under 35 U.S.C. § 102 be reconsidered and withdrawn.

II. Rejection of Claims Under Section 102 - Stafford

Claims 1 to 4, 7, 8 and 11 to 13 have been rejected under 35 U.S.C. § 102 as being allegedly anticipated by Stafford. Applicants have canceled claims 2, 3, 12 and 13, thereby obviating the rejection of these claims. Applicants have also amended independent claims 1 and 7 to clarify that the axially projecting section and the radially extending lip are integral with the header plate. Applicants submit that this is inherent in its specification and is illustrated in FIGS. 4 to 6.

Stafford discloses a shell and tube heat exchanger comprising a tube sheet assembly (400) and a number of separate annular metal rings (118, 120, and 122) that are positioned along the sheet assembly outer diameter. The Examiner alleges that these rings are the "axially projecting section" of Applicants' header plate. However, these rings are separate parts and are not an integral part of the header plate as recited in Applicants' amended independent claims.

Further, Stafford discloses the use of a separate metal key (126) that is positioned along the sheet assembly outer diameter. The Examiner alleges that such metal key is the "radially extending lip" of Applicants' header plate. Again,

Amendment Dated April 6, 2006
Reply to Office Action Dated
January 6, 2006

-9-

Appl. No. 10/737,380
Atty. Docket No. H0004919

however, this key is a separate part and is not an integral part of the header place as called for in Applicants' amended independent claims.

With respect to independent claim 11, this claim has been amended in the manner noted above in Section I of this Amendment. Additionally, this claim has been amended to clarify that the header plate radially projecting lip is positioned along the shell open end. This is not the case with the metal key (126) of Stafford, that discloses its placement as being within a recessed wall section of a flange (86).

Accordingly, for the reasons presented above, Applicants submit that Stafford fails to disclose each and every claim feature as recited in independent claims 1, 7 and 11, and respectfully requests that the rejection of these claims, and claim 4 depending from independent claim 1, under 35 U.S.C. § 102 be reconsidered and withdrawn.

III. Rejection of Claims Under Section 102 - Takayuki

Claims 1 to 5, 7 to 9, and 11 to 14 have been rejected under 35 U.S.C. § 102 as being allegedly anticipated by Takayuki. Applicants have canceled claims 2, 3, 12 and 13, thereby obviating the rejection of these claims. Applicants have also amended independent claims 1, 7 and 11 to better clarify the attachment arrangement between the header plate and the shell; specifically, that the header plate is attached to the ridge of the shell that extends radially within the recessed section.

Amendment Dated April 6, 2006
Reply to Office Action Dated
January 6, 2006

-10-

Appl. No. 10/737,380
Atty. Docket No. H0004919

Takayuki discloses an exhaust gas heat exchanger comprising a core plate (103) that appears to be positioned between the tank (102) of the heat exchanger and the bonnet (106). Takayuki, however, fails to disclose a heat exchanger comprising a header plate configured to provide the shell attachment as recited in Applicant's amended independent claims 1, 7 and 11; namely, the core plate does not fit against a radially extending ridge within the tank.

Therefore, Applicants submit that Takayuki fails to disclose each and every feature recited in Applicants' amended independent claims, and respectfully requests that the rejection of these claims, and claims 4, 8, 9 and 14 depending respectively therefrom, under 35 U.S.C. § 102 be reconsidered and withdrawn.

IV. Rejection of Claims Under Section 103

Claims 6, 10 and 15 have been rejected under 35 U.S.C. § 103 as being allegedly unpatentable by Takayuki in view of Banzhaf. Applicants have amended independent claims 1, 7 and 11 in the manner noted above in Section III.

Here, the Examiner apparently relies on Banzhaf for its alleged disclosure of a heat exchange comprising a chamfer at ends that are welded. However, Banzhaf fails to disclose or remotely suggest the invention feature missing in Takayuki disclosed above in Section III.

Therefore, the combination of Takayuki with Banzhaf cannot operate to provide a suggestion about a claim feature that

Amendment Dated April 6, 2006
Reply to Office Action Dated
January 6, 2006

-11-

Appl. No. 10/737,380
Atty. Docket No. H0004919

is missing in each. Thus, one skilled in the art having knowledge of Takayuki and Banzhaf would not find it obvious from the combination of these patents to construct a heat exchanger comprising the feature noted above recited in Applicants' independent claims.

In view thereof, Applicants submit that its heat exchanger as recited in these amended independent claims are not obvious based on the combination of Takayuki and Banzhaf, and respectfully request that the rejection of claims 6, 10 and 15, depending from respective independent claims 1, 7 and 11, under 35 U.S.C. § 103 be reconsidered and withdrawn.

V. New Claims

New claims 16 to 19 have been provided that disclose subject matter that is well supported by the specification. Accordingly, Applicants respectfully request that these new claims be entered and examined.

//

Amendment Dated April 6, 2006
Reply to Office Action Dated
January 6, 2006

-12-

Appl. No. 10/737,380
Atty. Docket No. H0004919

VI. Conclusion

For the reasons presented above, Applicants respectfully request that the rejections of the claims under 35 U.S.C. § 102 and 35 U.S.C. § 103 be reconsidered and withdrawn, that new claims 16 to 19 be entered and examined, and that claims 1, 4 to 11, and 14 to 19 be passed to allowance.

Respectfully submitted,



Date: April 6, 2006

Grant T. Langton, Esq.
Reg. No. 39,739
1900 Avenue of the Stars
Seventh Floor
Los Angeles, CA 90067-4308
(310) 203-8080

GTL

Amendment Dated April 6, 2006
Reply to Office Action Dated
January 6, 2006

-13-

Appl. No. 10/737,380
Atty. Docket No. H0004919